	Application No.	Applicant(s)						
Office Antique Commence	10/583,688	KIM ET AL.						
Office Action Summary	Examiner	Art Unit						
	YEWEBDAR T. TADESSE	1792						
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. lely filed the mailing date of this communication. D (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on								
	action is non-final.							
3) Since this application is in condition for allowan	•	secution as to the merits is						
closed in accordance with the practice under E	•							
Disposition of Claims								
4) Claim(s) 1-3 is/are pending in the application.								
4a) Of the above claim(s) is/are withdraw	n from consideration.							
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1 and 3</u> is/are rejected.								
7)⊠ Claim(s) <u>2</u> is/are objected to.								
8) Claim(s) are subject to restriction and/or	election requirement.							
Application Papers								
9) The specification is objected to by the Examiner								
10)⊠ The drawing(s) filed on <u>20 June 2006</u> is/are: a)[		by the Examiner.						
Applicant may not request that any objection to the d	lrawing(s) be held in abeyance. See	37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.						
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign particle.  a) All b) Some * c) None of:	oriority under 35 U.S.C. § 119(a)	-(d) or (f).						
<ol> <li>Certified copies of the priority documents</li> </ol>	have been received.							
<ol><li>Certified copies of the priority documents</li></ol>	•							
<ol><li>Copies of the certified copies of the priori</li></ol>	ty documents have been receive	d in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of	of the certified copies not receive	d.						
Attachment(s)								
1) Notice of References Cited (PTO-892)	4) Interview Summary							
Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 04/30/2007.  5) Notice of Informal Patent Application 6) Other:								

Receipt date: 04/30/2007

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OIPE	Application Number	10/583,688
	Filing Date	June 20, 2006
FORM APP 2 0 2007 (to be used for all correspondence after initial filling)	RFirst Named Inventor	Hyung-Jun KIM
(to be used for all correspondence after initial filling)	Art Unit	1762
Carried St.	-Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	1455-061789

ENCLOSURES (Check all that apply)								
ENCLOSURES (Check all that apply)								
☐ Fee Transmittal Form	☐ Drawing(s)	☐ After Allowance communication to Technology Center (TC)						
☐ Fee Attached	☐ Licensing-related Papers							
☐ Amendment/Reply	□ Petition	<ul> <li>Appeal Communication to Board of Appeals and Interferences</li> </ul>						
☐ After Final	Petition to Convert to a Provisional Application	☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)						
☐ Affidavits/declaration(s)	☐ Power of Attorney, Revocation	☐ Proprietary Information						
☐ Extension of Time Request	Change of Correspondence Address	☐ Status Letter						
☐ Express Abandonment Request	☐ Terminal Disclaimer	Status Letter						
■ Information Disclosure Statement	☐ Request for Refund	<ul><li>Other Enclosure(s) (please identify below)</li></ul>						
☐ Certified Copy of Priority Documents	CD, Number of CD(s)							
☐ Response to Missing Parts/ Incomplete Application	Remarks							
☐ Response to Missing Parts under 37 CFR 1.52 or 1.53								
SIGNATU	RE OF APPLICANT, ATTORNEY, OR A	GENT						
Firm Kent E. Baldauf								
or The Webb Law Firm								
Individual name								
Signature Sun E (Su	alder							
Date April 25, 2007	7							

	CERTIFICATE OF TRANSM	ISSION/MAILING					
I hereby certify that this con sufficient postage as first cla the date shown below.	espondence is being facsimile transmitted to the ass mail in an envelope addressed to: Commission	USPTO or deposited with the Unner for Patents, P.O. Box 1450,	ited States Postal Service with Alexandria, VA 22313-1450 on				
Typed or printed name Diane Paull							
Signature Diane Paull Date 04-25-2007							

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Attorney Docket No. 1455-061789

10583688 - GAU: 1792

THE ENITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

APR 3 0 2007

10/583,688

Confirmation No. 4502

Applicants<sup>1</sup> Filed

June 20, 2006

بي/Hyung-Jun KIM et al.

Title

Cold Spray Apparatus Having Powder Preheating Device

Art Unit

1762

Examiner

Customer No.

28289

INFORMATION DISCLOSURE STATEMENT TRANSMITTED BEFORE MAILING OF FIRST OFFICE ACTION

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby submit this Information Disclosure Statement together with a completed Form PTO/SB/08a.

This application is the United States national phase of PCT Application No. PCT/KR2002/003395. The International Search Report dated April 11, 2005, for the underlying PCT application identified two United States references and two Korean references. KR 99-007365 is equivalent to U.S. Patent No. 6,110,544; and KR 10-0245,231 is equivalent to U.S. Patent No. 5,855,965. The two Korean references and four U.S. references are listed on Form PTO/SB/08a. Copies of the foreign references are being submitted with this Information Disclosure Statement as well as a copy of the International Search Report. The degree of relevance for these references is indicated in the International Search Report.

The remaining references are cited on pages 2 and 3 of the instant specification.

U.S. Patent Application Publication No. US 2001/0042508 cited in the specification has now issued as U.S. Patent No. 6,502,767.

U.S. Patent Application Publication No. US 2001/0042508 has issued as U.S. Patent No. 6,502,767.

> I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450. Alexandria, Virginia 22313-1450 on April 25, 2007. Diane Paull

{W0297367.1}

(Name of Person Mailing Document) Signature

U.S. Patent Application Publication No. US 2002/0033135 has issued as U.S. Patent No. 6,722,584.

U.S. Patent Application Publication No. US 2002/0102360 has issued as U.S.

Patent No. 6,444,259.

Attorney Docket No. 1455-061789

U.S. Patent Application Publication No. US 2002/0182311 has issued as U.S.

Patent No. 6,592,935

U.S. Patent Application Publication No. US 2002/0182313 has issued as U.S.

Patent No. 6,773,763.

Pursuant to 37 CFR §1.98, no copies of the United States patents are

enclosed.

No fee is believed to be due for the filing of this Information Disclosure Statement as it is being submitted before a first Office Action on the merits. Nevertheless, the Commissioner for Patents is hereby authorized to charge any additional fees which may be required to Deposit Account No. 23-0650. This Information Disclosure Statement is submitted in duplicate.

Respectfully submitted,

THE WEBB LAW FIRM

Kent E. Baldauf

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Pittsburgh, PA 15219 Telephone: 412-471-8815

Facsimile: 412-471-4094



Receipt date: 04/30/2007

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Substitute for form	1449A/PTO			Complete if Known		
WEODI	ATION	NOOL OO	N.D.E.	Application Number	10/583,688	
	ATION [			Filing Date	June 20, 2006	
STATEMENT BY APPLICANT				First Named Inventor	Hyung-Jun KIM	
(Use as many sheets as necessary)				Art Unit	1762	
(000)				Examiner Name		
Sheet	1	of	1	Attorney Docket Number	1455-061789	

	-			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number - Kind Code <sup>2 (if known)</sup>		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-	6,464,933 B1	10-15-2002	Popoola et al.	
		US-	5,459,811 A	10-17-1995	Glovan et al.	
		US-	6,110,544 B1	08-29-2000	Yang et al.	
		US-	5,855,965	01-05-1999	Molerus et al.	
		US-	6,365,222 B1	04-02-2002	Wagner et al.	
		US-	6,491,208 B2	12-10-2002	James et al.	
		US-	6,139,913 B1	10-31-2000	Van Steenkiste et al.	
		US-	6,283,386 B1	09-04-2001	Van Steenkiste et al.	
		US-	6,502,767 B2	01-07-2003	Kay et al.	
		US-	6,722,584 B2	04-20-2004	Kay et al.	
		US-	2002/0073982A1	06-20-2002	Shaikh et al.	
<b>3</b>		US-	6,444,259 B1	09-03-2002	Subramanian et al.	
		US-	6,592,935 B2	07-15-2003	Leonardi et al.	
		US-	6,773,763 B2	08-10-2004	Leonardi et al.	
		US-	2002/0182314A1	12-05-2002	Leonardi et al.	

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	1 Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country	Code <sup>3</sup> Number <sup>4</sup> Kind Cod	ie <sup>5</sup> (if known)			or Relevant Figures Appear	T⁵	
		KR	99-007365	Α	01-25-1999	Yang et al.	Equiv. to U.S. 6,110,544		
		KR	10-0245231	B1	02-15-2000	Molerus et al.	Equiv. to U.S. 5,855,965		

Examiner	Nowohdar T Tadacca/	Date	12/10/2008
Signature	/ rewebdar i radesse/	Considered	12/19/2000

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 'Better Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

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# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2002/0073982 A1 Shaikh et al.

(43) Pub. Date:

Jun. 20, 2002

### (54) GAS-DYNAMIC COLD SPRAY LINING FOR ALUMINUM ENGINE BLOCK CYLINDERS

(76) Inventors: Furqan Zafar Shaikh, Troy, MI (US); Howard Douglas Blair, Romulus, MI (US); Rodney John Tabaczynski, Northville, MI (US); Tsung-Yu Pan, Ypsilanti, MI (ÙS)

> Correspondence Address: Ernest E. Helms Dykema Gossett PLLC Suite 300 1577 North Woodward Avenue Bloomfield Hills, MI 48304-2820 (US)

(21) Appl. No.: 09/739,087 (22) Filed:

### Dec. 16, 2000 **Publication Classification**

Int. Cl.<sup>7</sup> ...... F02D 41/00; B23P 11/00 

#### (57)ABSTRACT

A method and apparatus for gas-dynamic cold spraying a liner 3 in a cylinder 2 of an aluminum engine block 1 is provided. The gas-dynamic cold spray liner 3 allows the aluminum engine block 1 to have a hardened cylinder surface 10 without the induction of residual hoop stress within the aluminum engine block 1.

